AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at line 21 of page 34 with the following

paragraph:

As a method for screening for, for example, a protein (e.g., a ligand) binding to a protein

of the present invention, many methods known by persons skilled in the art can be employed.

Examples of such a screening method include immunoprecipitation (Harlow, E. and Lane, D.:

Antibodies, pp. 511-552, Cold Spring Harbor Laboratory publications, New York (1988)), West-

Western blotting method (Skolnik, E. Y. et al., Cell (1991) 65, 83-90), the 2-hybrid system using

cells (Fields, S., and Sternglanz, R., Trend. Genet. (1994) 10, 286-292; and Dalton S, and

Treisman R., (1992) Characterization of SAP-1, a protein recruited by serum response factor to

the c-fos serum response element. Cell, 68, 597-612) ("MATCHMAKER Two-Hybrid System,"

"Mammalian MATCHMAKER MATCHMAKER™ Two-Hybrid Assay Kit." "

MATCHMAKER MATCHMAKER™ One-Hybrid System." (all of them are produced by

Clontech), and "HybriZAP HYBRIZAP" Two-Hybrid Vector System" (produced by

Stratagene)), a method utilizing affinity chromatography, and a method using a biosensor that

utilizes the surface plasmon resonance phenomenon.

Please replace the paragraph beginning at line 12, page 41 with the following

paragraph:

Next, in vitro transcription and translation (Promega, TNT T7 TNT T7™ Quick Coupled

Transcription/Translation System cat.no.L1107) were carried out, and then clones for which

products of 50 kDa or more had been confirmed were selected.

Please replace the paragraph beginning at line 16, page 41 with the following

paragraph:

Next, the terminal nucleotide sequences of the selected clones were determined. With the

thus obtained sequences as queries, the nr database (All GenBank+EMBL+DDBJ+PDB

sequences (but no EST, STS, GSS, or phase 0, 1, or 2 HTGS sequences)) was homology-

searched using the BLASTN 2.2.1 homology search program (Altschul, Stephen F., Thomas L.

Madden, Alejandro A. Schaffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J.

Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search

programs," Nucleic Acids Res. 25: 3389-3402). For sequencing, a DNA sequencer (ABI

PRISM377 ABI PRISM 377) produced by PE Applied Biosystem and a reaction kit produced

by the same were used. Most sequences were determined by a dye terminator method using

shotgun clones. Some nucleotide sequences were determined by synthesizing oligonucleotides

based on the determined nucleotide sequences, and then carrying out a primer walking method.

Please replace the paragraph beginning at page 42, line 4, with the following

paragraph:

By the use of an in vitro transcription and translation system (Promega, TNT T7 TNT

T7 Quick Coupled Transcription/Translation System cat. no. L1107), a gene product from the

cDNA clone FJ04470 was expressed.

Please replace the paragraph beginning at line 7, page 42, with the following

paragraph:

The product, in which ³⁵S-labeled methionine had been incorporated was subjected to

12.5% SDS-PAGE electrophoresis. Gel was dried, autoradiography was carried out using a

BAS2000 (FUJIFILM) system, and then the gene product of the clone FJ04470 was detected.

The size of the FJ04470 product was 90 kDa as measured using a size marker (Cat. 161-0324) of

Kaleidoscope KALEIDOSCOPE™ Prestained Standards of Bio-Rad.

Please replace the paragraph beginning at line 13, page 47, with the following

paragraph:

The amount of the transcript of the gene of the present invention was analyzed by the

ABI PRISM ABI PRISM™ (registered trademark) 7700 Sequence Detection System (ABI) using

cDNAs of various tissues. For analysis of expression levels of GAPDH gene, a Pre-Developed

TagMan TAQMAN™ PCR Assay Kit (ABI, #4310884E) was used. The composition for the

PCR reaction was as follows. 5 µl of MTC Panel cDNA (Clontech) was added to Master Mix (a

mixture of 1.25 µl of 20X Control Mix (GAPDH), 6.25 µl of DEPC-treated water (Ambion,

#9920), and 12.5 µl of TaqMan TAQMAN™ Universal PCR Master Mix (ABI, #4304437)) to 25

μl. Gene amplification was carried out for 40 cycles, each cycle consisting of 50°C for 2

minutes, 95°C for 10 minutes, and 95°C for 15 seconds -60°C for 1 minute) using an ABI

PRISM ABI PRISM™ (registered trademark) 7700 Sequence Detection System of ABI on a

MicroAmp Optical 96-Well Reaction Plate (ABI, #N801-0560). As MTC Panel cDNAs, Human

MTCTM Panel I (K1420-1), Human MTCTM Panel II (K1421-1), and Human Tumor MTCTM

Panel I (K1422-1) of Clontech were used. Total RNA was collected by ISOGEN™

(Wako Pure Chemical Industries) from the cultured carcinoma cells and then the genomic DNA

was digested using amplification grade Dnase I (Invitrogen). The method was carried out

according to the manual recommended by Invitrogen. The total RNA treated with DNase I was

reverse-transcribed into a cDNA using Invitrogen superscript II reverse transcriptase.

Please replace the paragraph beginning at line 4, page 48, with the following

paragraph:

Regarding the expression levels of the gene of the present invention, primer sequences

that were optimal for RT-PCR were searched for using PrimerExpress 1.5 of ABI. When the

sequence of the FJ04470 gene was compared with the genome sequence, the sequence matched

the sequence of AC016168.18. As a result of analyzing intron and exon structures, the presence

of an intron comprising approximately 2260 nucleotides were inferred in the vicinity of the

nucleotide number of 2158 of FJ04470. Thus, primer positions were determined so that they

sandwiched the region. When primer 4470-2043 (5'-AGATCCATGGCACCGTGTACTAC-3')

and primer 4470-2230 (5'-GAAGATGCAACCATTGGCG-3') are used, 188 nucleofides will be

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of the genome. 0.5 µl of 10 µM primer 4470-2043, 0.5 µl of 10 µM primer 4470-2230, 6.5 µl of

amplified in the case of cDNA and approximately 2450 nucleotides will be amplified in the case

DEPC-treated water, and 12.5 µl of SYBR Green PCR Master Mix (ABI, #4309155) were mixed

to 20 µl. 1 µl of MTC Panel cDNA (Clontech) and 4 µl of DEPC-treated water (treated water)

were added to the mixed solution to 25 µl. Gene amplification was carried out for 40 cycles,

each cycle consisting of 50°C for 2 minutes, 95°C for 10 minutes, and 95°C for 20 seconds-60°C

for 1 minute) using an ABI-PRISM ABI PRISM™ (registered trademark) 7700 Sequence

Detection System of ABI on the MicroAmp Optical 96-Well Reaction Plate of ABI (ABI,

#N801-0560). A standard curve was created using a plasmid into which a GAPDH amplicon

(the expression level of the GAPDH gene was used as an internal control) had been cloned.

Based on the curve, the number of copies existing in the reaction solution was calculated. Table

3 below shows the results of comparing the expression levels in different tissues using relative

values obtained by dividing each expression level of the gene of the present invention by each

expression level of the GAPDH gene.